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Emergency Public Information

Civil Defense — Moscow 1969

Industrial Disaster Readiness

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Contents

Emergency Public Information Planning 1
A. M. Stirton

Civil Defense—Moscow 1969 8
Extract

Blueprint for Industrial Disaster Readiness 19
Virgil L. Couch

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In addition to publishing articles which reflect Canadian Government policy the Digest may also publish articles by private individuals on subjects of current interest to the emergency measures programme. The views of these contributors are not necessarily subscribed to by the Federal Government.

Editor: A. M. STIRTON

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EMERGENCY PUBLIC INFORMATION PLANNING IN CANADA

by
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The following address was presented to the NATO CIVIL DEFENCE COMMITTEE, Brussels, Belgium, September, 1971.

Introduction

If a nuclear war attack against North America occurred on very short notice—say, one hour or less, what could we do to reduce the effects of a nuclear attack on Canada and Canadians? From a public information point of view, a little but not very much. The sirens could be sounded and, if the attack occurred during the period 6 a.m. to midnight, every radio and television station in the country could be brought into a national network configuration to broadcast the Attack Warning to advise the public what the noise of the sirens means and what everyone listening must do immediately. The advice as you will hear later on is very basic—duck, hide, hope and pray. That is about our total public information capability against a surprise, out of the blue, attack. As a matter of fact, I am not too sure that the great percentage of the Canadian public would at this time know that the sounding of sirens means "listen to a radio" for survival instructions.

Requirements to meet limited capability

Yet to provide even this limited surprise attack capability required something over two years of solid planning, coordination and work. A readiness to meet an attack with little warning is not something which can be created overnight or in a period of a few months and the development of our current public information plan on warning and instructing the public had to include

- the machinery and policies to link all broadcast stations into an emergency broadcasting system consisting of about 550 AM-FM and TV stations;
- installation of communications between emergency operations centers and the broadcast networks;
- preparation and prepositioning of broadcast tapes in both English and French languages with suitable voices for each region of the country;
- coordinated information planning with federal departments and provinces to ensure uniformity, compatibility and completeness of coverage of public instructions;
- coordination of our plans and those of the United States to ensure compatibility of instructions to the public. Coordination is necessary because ours and U.S. broadcasts can be heard on both sides of the border.
- involvement in all aspects of the warning system;
- written operational plans and procedures necessary for rapid response;
- and, equally important, planning had to build in a capability to provide information, advice and instructions to the public from emergency government, locations during the warning, the attack and the post-attack phases through dedicated circuits of an Emergency Public Information Service.

Emergency Public Information Service

In peacetime the national, international and regional exchange of news in Canada is based almost completely on central offices in Montreal and Toronto. World news, major provincial and municipal happenings, and even intercity items of news interest are filed to these central newspaper, radio and television bureaus for editing, balance, and re-dissemination to media in all parts of the country. A nuclear attack on Canada would almost certainly include these two prime target cities of Montreal and Toronto and with their destruction the national and international news exchange system would be destroyed.

To ensure a continuing public information and advice capability not only for radio but also for presses left intact after an attack, the Emergency Public Information Service is being developed as a miniature, austere, wartime national service, operating out of protected dispersed centres. This emergency information service consists of pools of newsmen, broadcasters, and a few government officials in Regional Emergency Government Headquarters in each province and in a key national emergency site as well as a special relocated national bilingual news center to replace peacetime bureaus in Toronto and Montreal. As an entity this system will be able to continue to monitor and exchange information essential to the morale of survivors, disseminate advice and instructions to the public, and in the post-attack period, as a surviving system, assist in initial steps towards recovery of the nation.

While radio broadcasting from protected studios in these headquarters in the initial period after an attack will be the main means of passing emergency information it is almost certain that local agencies in the form of daily or weekly newspapers will continue to demand and

expect public material. With its own teletype machines connected by safe-routed dedicated circuits the newsmen and government information officers of the Emergency Public Information Service will provide this essential need. For reports on international events the Canadian wartime system will be closely linked with the emergency information service of the United States.

Public Education in an Emergency

From a public information planning point of view the greatest need today is public education on warning, its meaning and what the public is to do before, and after the sirens sound.

The ability of civil emergency planners to educate citizens to know the threat, and respond to advice when advice becomes necessary during crisis, spells the difference between life and death not only for the individual, but also for the nation. Consequently, we in Canada feel a major part of information planning must be devoted to having readily available prepositioned reserves of material—and written plans for its emergency distribution or dissemination—in order to give every individual and every family advice and instructions on steps which must be taken for personal and family survival should nuclear war threaten.

It is in this field I would like to highlight what I consider to be some of the Canadian achievements, the current status as it were in the terms of our capability to meet a rapid escalation of international crisis where, by and large, education of the public would have to be carried out in a few days.

Let me start the outline of inventory or status, by suggesting that with the assistance of broadcasters, newspapers, displays, wall cards, and home delivery publications currently in storage or on tape, we could within one week inform 98% of the public on the meaning of the Attack Warning sirens and what steps must be taken by each individual for self-help survival.

The implementation and effectiveness of this crash public information program would of course be dependent on governmental recognition that a distinct war threat is on the horizon and on its authority to force feed the educational process. But, and I emphasize again, for our organization to be in position to react requires a minimum staff operating on a day-to-day basis preparing and updating the types of material required.

On the other hand lack of preparedness for an immediate response when the government publicly recognizes that deteriorating international conditions warrant crisis action could be embarrassing. Such governmental recognition would immediately crystalize the demand for public information, advice and instructions, probably greatly in excess of even the most extensive and expensive programs.

Canada's basic survival literature

To accomplish the mission of educating the public of the meaning of the sirens, publications now in storage in the provinces, and in federal reserve, number some 10,000,000 leaflets and booklets which would be made available according to existing federal and provincial plans.

There are not enough copies of our key publication "11 Steps to Survival" for home delivery to 6½ million Canadian households but as an interim measure, the entire text has been taped ready for overnight automated transmission to every Canadian daily newspaper. The national news agency, Canadian Press, is the custodian of reserve tapes in French and English.

Future steps to ensure our capability to saturate the country with this important publication will include annual reprinting in both languages and the preparation of newspaper mats and offset printing negatives for some 1,400 daily and weekly newspapers.

Six and a half million copies of a reminder leaflet "Check and Double Check" are bundled and held in federal reserve in postal walk packages for ready mail delivery.

The Canada Emergency Measures Organization has also provided every province with a reserve of wall cards and wallet cards which by easy posting in public places and house to house delivery of the latter will advise the public of the meaning of the sirens' undulating tone. Another inventory item for educating the public on the warning is a folding display about 1 meter by 3 meters when unfolded. Eight hundred of these light, easily portable displays have been positioned in provincial reserves for crisis use in shop windows, public concourses, hallways of public buildings, or anywhere they will be seen by a large number of people. This display contains some of the information in "Step 4" of "11 Steps to Survival".

In addition to publications prepared and pre-positioned by Canada Emergency Measures Organization, other federal departments, principally Agriculture and National Health and Welfare, provinces and some municipalities have prepared printed material for the general public or special groups distribution. These of course would be circulated during the crisis period.

Broadcasting

Now if I may I would like to outline what has been done for television and radio. In my view these two educational, instructional and advice media will provide the widest and most effective public information coverage in the short days of any crisis. This has been proven in peacetime crises such as floods, tidal waves, winter storms and other major disasters.

Canadian broadcasters including television can function as part of a national Emergency Broadcasting System, meet provincial requirements by creating regional or provincial networks, or operate locally to inform and educate municipalities regarding local, provincial or national affairs.

Just a word about Canadian broadcasting planning for response to the threat of war.

The Emergency Broadcasting System was developed following a Cabinet direction in 1961 to ensure that the

Canadian public could and would be kept informed in the event of nuclear attack on Canada despite subsequent destruction of broadcast studios and control centres in major cities. The system was developed by the Canadian Broadcasting Corporation to a point where, prior to economy measures of 1968 all Canadian broadcast stations could be formed into a national network in a matter of 3-4 minutes.

Current restrictions on government spending have slowed down this rapid response capability somewhat but, as the government directed in 1968, "not beyond the point where it could be restored in a matter of hours or a few days". Given the direction of government which I mentioned previously, the Emergency Broadcasting System could be put in a standby posture within an hour or two simply by restoring 24-hour broadcast schedules by Canadian Broadcasting Corporation stations and alerting private stations through the facilities of news agency wire services.

Built at a capital cost of about $750,000 the Emergency Broadcasting System consists of

- safe routed communications between key stations in each region and regional warning centres to ensure the formation of the system when so ordered;
- protected broadcast studios, control rooms and transmitters for each of nine Regional Emergency Government Headquarters. Six of these are permanent installations, the other three in less populated provinces have interim mobile equipment. Only one province still requires an interim headquarters and the broadcast studio which will be located in it to serve that province.
- pre-recorded tapes and certain proforma scripts have been prepositioned not only in these emergency studios of the Emergency Broadcasting System but also in regional peacetime key studios.
- an alarm system which can warn stations to cease local programs and join the Emergency Broadcasting System network is still connected to all Canadian Broadcasting Corporation and CBC-affiliated stations. As I mentioned a moment ago private stations will be alerted by a commercial broadcast news agency.
- staff designated to man emergency stations on short notice are listed, and
- probably most important, all Canadian stations are aware of the policies, procedures and their responsibilities in the Emergency Broadcasting System program.

This capability of the Emergency Broadcasting System to respond almost immediately is one of our most valuable assets.

Broadcasting Material

Radio and television broadcasting has an insatiable, adaptable, and powerful appetite. In crisis, as you well know from your own experience, broadcasters can at some time of the day reach out and inform just about every man, woman and child within viewing or listening range.

Public information planning in Canada places heavy emphasis on the effective use of these media. In each province, many municipalities and at many radio stations there are now available some twelve one-minute public service television clips and six radio spot announcements, mostly promoting survival literature. These can and are being used occasionally and certainly they would be used in the crisis period.

About two years ago we started production of film clips of a more direct educational nature. Three of the new television clips, each of 1 minute duration, are designed to inform the public of the meaning of the siren warning. The first two can be used in peacetime if desired by local planners while the third is a reserved clip which would only be released on authority of the federal government. I should mention that the sound version of these clips will be available for radio stations.

We are now in the late stages of production of a half-hour coloured, animated film based on the booklet "11 Steps to Survival", for both general peacetime educational use and for essential television advice during a period of increasing international tension. This film when complete, funds are the limiting factor, will be a valuable asset in the public information inventory and doubly so in a crisis period as short as a week to ten days. It will shortly reach the stage of production where given funds and priority an English broadcast version could be completed in a matter of two to three days. This "11 Steps" film will replace or supplement the current reserved dramatized film on emergency shelter construction "Time to Live".

While the "11 Steps" film is in production, and as an adjunct to it when it becomes necessary, Canada EMO has in reserve a short film for national television giving emergency advice to the public on shelter construction, supplies and fire precautions.

Planning deadlines

There is still much to be done in the audio-visual field to increase preparedness of Canadians to survive nuclear war. NATO strategic planning, although admitting the possibility of surprise attack, is based on the possibility of days or even weeks of warning. What then can be done if more time is available?

Because no one can say with a reasonable degree of certainty just what time will be available, most plans and preparations should be in hand at the onset of the emergency. Planning starting only in time of emergency will tend to be confused because of mythical deadlines. It is because the consequences to the Canadian public of waiting until the emergency are so grotesque, that Canada EMO devotes as much time and limited money as it does every year to the program of information planning and the preparation of reserve material.

1
SELF-HELP
FLOOD
PREPARED BY
DEPARTMENT OF NATIONAL DEFENCE

SELF-HELP
3
EARTHQUAKE
PREPARED BY
DEPARTMENT OF NATIONAL DEFENCE • OTTAWA

Future efforts for Canada

Given either time or more resources Canada Emergency Measures Organization would exploit the following:

- more proformae broadcasts for use or adaptation at the local level;
- television production scripts with visuals for local, regional and national use;
- more TV clips and radio spot announcements;
- community shelter plan information material for when a national program is approved;
- public speakers' guides and material;
- billboard displays on the warning for reserves;
- information courses for local coordinators on how to achieve the best results from the media;
- an increased number of conferences with provincial, municipal and federal information specialists on emergency public information planning such as I now conduct periodically.

The potential is unlimited. The demand for information under severe conditions will always exceed availability.

Peacetime Public Information

Before closing I would like to make brief mention of the Canada EMO information planning for peacetime disasters. This aspect of civil emergency planning is growing in importance in Canada each day with every natural or man made disaster be it hurricanes, winter storms, floods, pollution, explosions, or forest fires.

Canada EMO has recently produced the first three leaflets in a series designed to give basic advice to the public on what should be considered or done when faced with various types of disaster. These three inexpensive leaflets which have been given to the provinces for local use as required not only provide family and personal precautions, put authoritative response information into the files of newspapers, radio and television stations, but also suggest to provincial authorities that more local, detailed advice must be readily available when such events occur. (See illustrations)

A total of about two and one half million of these three leaflets have been produced and a fourth leaflet, giving advice on what to do in the event of winter electrical power failure is now in the early stages of production.

Peacetime disaster drills and procedures to inform and advise the public have been or will be developed by ourselves, federal departments, provinces and municipalities to include such things as provincial or operational area broadcasting networks for affected areas, how, when and where to establish central press information centers, production of homeowner and press kits containing detailed instructions, distribution of literature to the public, and so on.

The federal emergency measures information role in response to the threat or fact of peacetime disaster in Canada is in its infancy. But already it has been tested in such events as Tsunami or tidal warnings on the West coast, forest fires and floods in several provinces, hurricanes or very high winds, both inland and coastal oil pollution, an apartment block explosion, leakage of toxic gases, missing persons searches, air crashes, the recent major landslide which took 39 lives in Quebec and of course, a thing for which our country is noted —blizzards and winter storms.

At the local level civil emergency planners are even involved in the North American phenomena—rock festivals, parades, sports events and even beauty pageants. Because public involvement in local affairs is usually of great momentary importance, local publicity given to Emergency Measures Organization/Civil Defence contributions often assists local support.

Summary

In summary the components which give us a capability to inform the public in time of crisis or nuclear war are:

- An Emergency Broadcasting System of all Canadian radio and television stations.
- Prepositioned broadcast tapes and proforma scripts for this system.
- A siren warning system to advise people to listen to the radio.
- An Emergency Public Information Service which will be able to provide advice, instructions and information to the public.
- Advice publications in federal and provincial reserve depots.
- One key publication on tape for rapid distribution to English and French daily newspapers.
- Displays, wall cards and wallet cards to advise the public on the attack warning.
- A reserve of television and radio announcements.
- A short television film in being giving self-help survival instructions and a longer one based on the key publication "11 Steps to Survival" in production.
- Proforma broadcast material for local use.
- coordinated federal-provincial information plans plans to disseminate life saving advice and respond to major public demand.▲

The Director of NATO Civil Emergency Planning Staff, Marino Deveglia, during a recent two-day visit to Canada Emergency Measures Organization in Ottawa briefed federal civil planners on the current status of NATO developments in the field of international planning for civil response to the threat of nuclear war. In talks to Canada EMO officials and emergency planners from many federal departments Mr. Deveglia outlined some of the new problems and proposals which are being considered in the planning fields of air and sea transport, communications, wartime supply, food and agriculture, oil resources and economics. Canada is represented on sub-committees or working groups in these fields by specialists from various federal departments as well as being a full member of the 15 nation senior NATO Civil Defence Committee. Here from left to right are C. R. Patterson National Coordinator, Civil Emergency Measures, Mr. Deveglia and S. N. White, Director General Plans.

CIVIL DEFENSE-MOSCOW – 1969

RECEPTION AND RELOCATION OF DISPERSED OPERATIONAL AND SUPERVISORY PERSONNEL AND EVACUATED PEOPLE

The June-July edition of the Digest, Vol. 11, No. 3, published a comprehensive extract from a Soviet book, Civil Defense—Moscow 1969 prepared by the Oak Ridge National Laboratory, Tennessee. The following extract, Chapter 5 of the translation of the official Russian textbook is published with kind permission of the Laboratory.

The Principle of the Dispersal and Evacuation Operations

Protection of the population is implemented by dispersing and evacuating the people to outlying areas and providing them with protective shelters and personal means of protection.

Dispersal of the operational and supervisory personnel and their families and evacuation of the population at large from large cities to regions outside of urban areas will be initiated by a special government decree. The dispersal and evacuation operations must be carried out as fast as possible. The required period depends on the number of people involved, the available means of transportation, the distance to the outlying areas, the state of the highway system, and the level of readiness of the organization. "Dispersal" and "evacuation" represent different concepts.

The dispersal operation covers operational and supervisory personnel (and members of their families) of plants which continue their operation in large cities during the war. They are to be relocated in an outlying area, from which they may commute to work in shifts. They will spend their leisure time outside of the city.

Evacuation refers to operational and supervisory personnel of plants, the functions of which are scheduled to be transferred during the war to an existing similar, or a newly organized, enterprise at a remote location. In addition, this concept also covers persons who are unable to work or are not employed within the national economy.

The number of persons to be dispersed and evacuated will depend on the size and importance of the city and the presence of certain plants, institutions, educational and other installations within it. The nature and the state of preparedness of the outlying area will also greatly affect the dispersion and evacuation operations.

The "outlying area" is defined as the territory which lies between the outer boundary of the potential destruction of the city and the boundary of an administrative subdivision, such as a county, district, or republic (Fig. 26).

The outlying areas must be readied in peacetime. Development of the highway system, including auxiliary roads in rural areas, is of special importance. The existing communication system must be improved, the available housing increased, and the food and supply system expanded. Steps must be taken to identify and equip cellars, basements, farm buildings, and various underground structures as shelters for the population. Certain communities are further developed to receive plants and schools, and sources of water supply are prepared.

The tremendous size of the territory of the country, the socialistic planning system of the national economy, and the common ownership of the land, housing, plants, and municipal services make it possible to prepare the outlying areas in due time.

All means of transportation—railways, cars (trucks), riverboats, ships, and airplanes—will be used for dispersal and evacuation. However, the main modes of transport will be trains and motor vehicles.

For the most efficient use of highway transportation, it is necessary to organize the technical services; create a sufficient number of service stations, mobile refueling units, and repair shops; and closely control highway traffic.

The operational and supervisory personnel will be dispersed on the basis of their place of employment, such as the factory, plant, or other establishment where they work. Employees of a given enterprise and their families should be transferred together to the same or nearby areas. These areas should not be far from the city, but at the same time they should be sufficiently distant to ensure the safety of the population in case of a nuclear attack by the enemy. The dispersed employees should be resettled near railway stations and highways to reduce the time spent in commuting to and from work in the city. The time needed for the round trip should not exceed four to five hours; thus, the dispersal areas may be 60-80 kilometers (37-50 miles) or more from the city. Under such conditions the dispersed employees will be at work for 12 hours and on the road for 4 to 5 hours, leaving 7 to 8 hours for rest and personal activities. In the outlying areas the workers and the nonworking population will be assigned mostly to private homes, and when

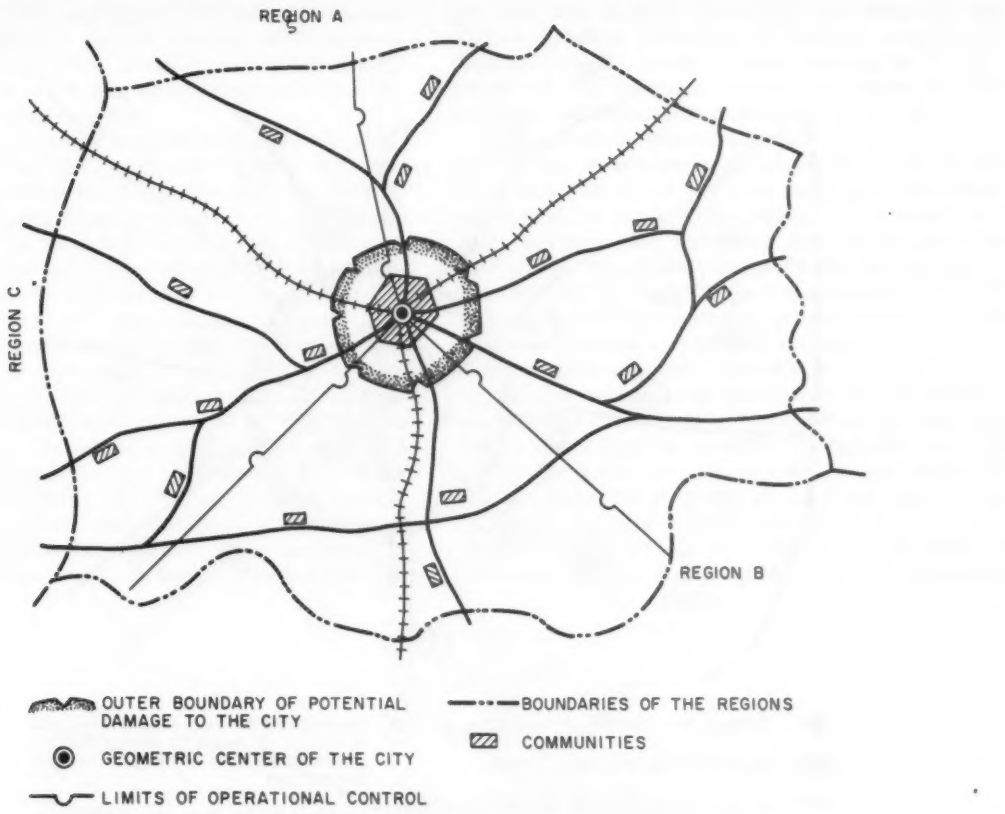

Figure 26. Outlying Areas.

houses are not available, in public buildings such as clubs, schools, youth camps, recreational buildings, rest homes, etc. The main principle of dispersal is: work in the city and rest in the outlying area.

When enemy attack is imminent or the civil defense organizations send out an alert, the shift actually at work should take refuge in the shelters or cellars of the enterprise or plant. The other shifts of workers—those resting in the outlying area—should also seek shelter in radiation-proof structures, if necessary. A timely and efficient dispersal will thus help conserve the labor force and ensure the continued production needed to carry on with the war and keep the country alive.

The personnel of plants, the activity of which is to be transferred to an outlying area, will be evacuated on the basis of their place of employment, while the nonworking individuals will be evacuated on the basis of their residence (housing office). The districts—relocation points of the plants and populations to be evacuated to outlying areas within the boundaries of their own county or region—will be determined and confirmed by order of the county or regional workers councils. As a rule, these districts should be located toward the remote zones of the outlying area.

Orders will be issued authorizing the plants and organizations to be evacuated to the buildings set aside for them by the district workers councils.

In the evacuation districts all housing and farm buildings which may be made suitable for the temporary resettlement of evacuees will be checked. The location of springs, artesian wells, and other sources of water which could be used to supply water to the population should be known in advance. In addition, the means needed to provide food, necessities, municipal services, and work for the evacuated population should be surveyed. As a general rule, belongings should be evacuated after the population has been resettled, but, if possible, both operations may be carried out simultaneously. The principle of relocating dispersed workers and evacuated persons, plants, and facilities is illustrated in Figure 27.

The sequence of the various dispersal and evacuation steps will depend on the particular situation and the specific features of the city and the remote area in question. It will be decided in each case by a special government order. The steps may be carried out in different order; for example, first dispersal, followed by evacuation; simultaneous dispersal and evacuation, or first evacuation then dispersal.

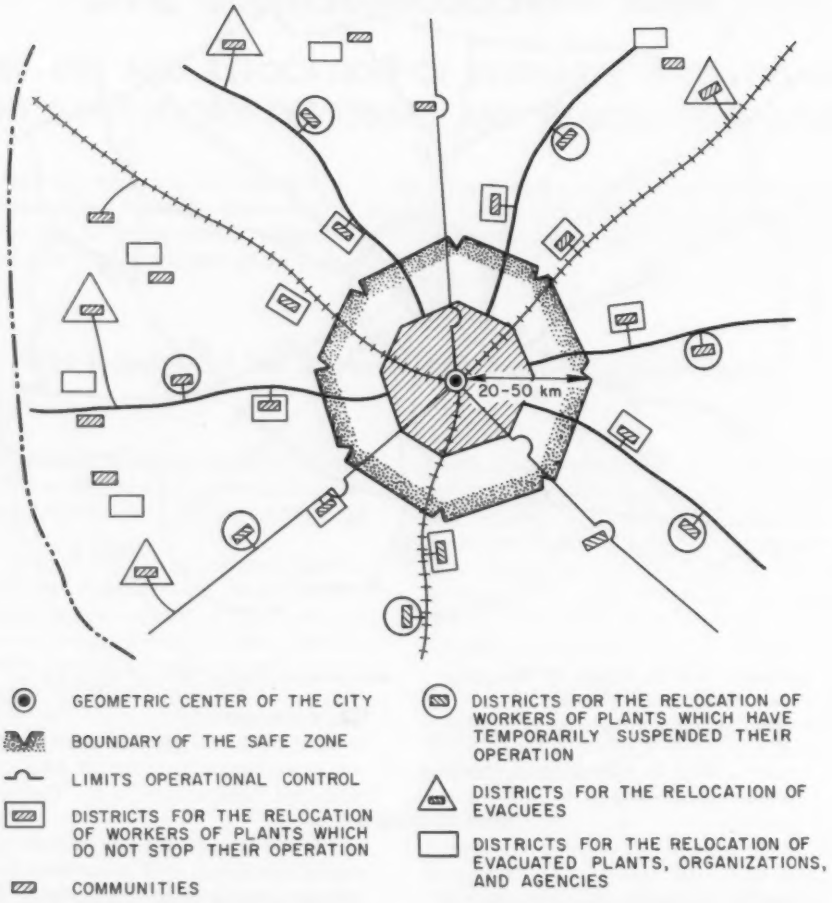
20-50 km
GEOMETRIC CENTER OF THE CITY
BOUNDARY OF THE SAFE ZONE
LIMITS OPERATIONAL CONTROL
DISTRICTS FOR THE RELOCATION OF WORKERS OF PLANTS WHICH DO NOT STOP THEIR OPERATION
COMMUNITIES
DISTRICTS FOR THE RELOCATION OF WORKERS OF PLANTS WHICH HAVE TEMPORARILY SUSPENDED THEIR OPERATION
DISTRICTS FOR THE RELOCATION OF EVACUEES
DISTRICTS FOR THE RELOCATION OF EVACUATED PLANTS, ORGANIZATIONS, AND AGENCIES

Figure 27. Schematic Diagram of the Relocation of Dispersed Workers and Evacuated Persons and Plants.

The simultaneous dispersal of workers and evacuation of the plants and institutions will greatly decrease the number of people in the cities; this in turn will sharply reduce population losses in case of a nuclear attack by the enemy. It has been stated in the foreign press that a nuclear attack of an unprotected large city may result in the loss of life of as much as 90% of the population. An early dispersal and evacuation could reduce the losses considerably, to a level between 5% and 8%.

Evacuation Agencies

Success of dispersal and evacuation will depend significantly on how well the reception and relocation of the dispersed workers and evacuees is organized. Those responsible for receiving and resettling both people and plants are the executive committees of the workers councils. They will exert their leadership through farm and village councils, the civil defense staffs of agricultural districts, collective and state farms, evacuation commissions, reception and assembly evacuation centers, embarkation and disembarkation (loading and unloading) points and stations. (Fig. 28).

The evacuation commission is created in peacetime. The Deputy Chairman of the Executive Committee of the District Workers Council usually serves as President of the Evacuation Commission, which also includes representatives of the district party committee, medical service, agricultural management organization, district supply office, district police department, transportation,

communication, and alerting services, educational and welfare organizations, district military headquarters, housing and utilities office, district trade union council, district committee of Young Communists, and three or four technical experts.

The district evacuation commission for the reception and relocation of the population carries out the following basic duties in cooperation with the district civil defense organization: preparing proposals listing the districts to be used for the relocation of people; participating in the work required to prepare and equip these areas; specifying the number and location of the reception centers; and determining the need and providing the means to transport children, invalids, and the aged from the unloading area to their billets. In addition, the evacuation commission helps to develop one of the most important sections of the civil defense plan—"Plan for the reception and relocation of the evacuated population"—and collaborates with other involved organizations to supply medical service, provisions, necessities, and municipal services to the population and also helps to find work for them. It selects the managers and the supervisory personnel of the reception centers, submitting the names to the district executive committee of workers councils for confirmation; it provides military training to the personnel of the reception centers and supervises the reception and relocation of evacuees in the district.

The regional reception centers are activated as soon as they receive warning of an imminent attack. At the same time, details of the plan to resettle the urban population in small communities are worked out, disembarkation and unloading stations prepared for the arrival of special trains, local transportation arranged for the incoming urban population to their permanent relocation quarters, and provisions made for necessary medical and general services.

Supervisory and staff personnel of the civil defense organization of collective and state farms will assign in advance the available houses, industrial buildings and others which may be used for billeting the relocated people from the city. They will also determine the transportation requirements for carrying children, the sick, and the aged to their new living quarters, and develop plans for the reception and relocation of dispersed workers and evacuees. They will operate in

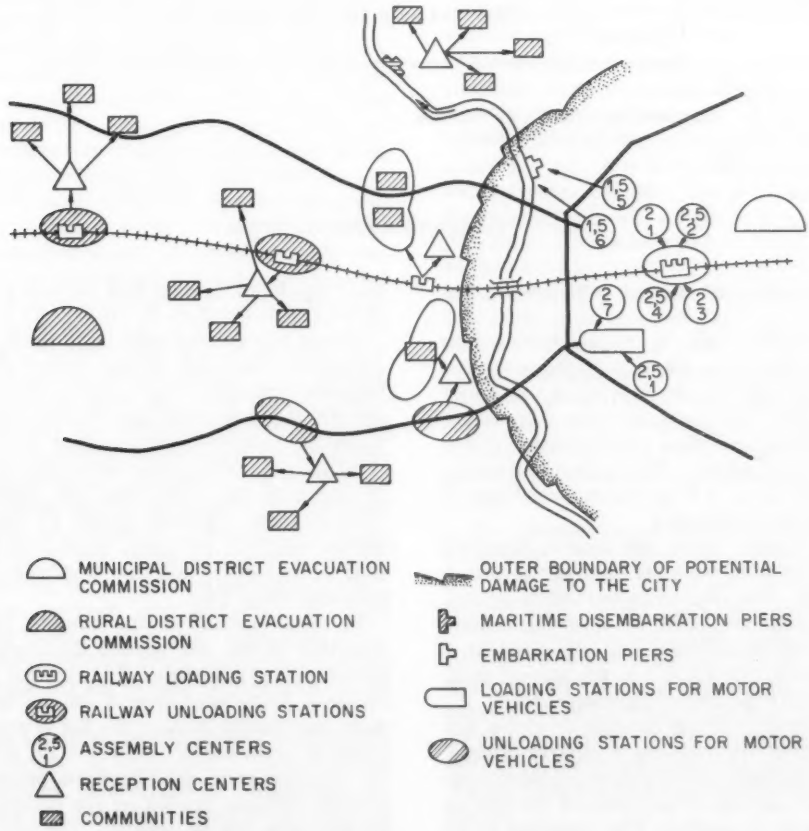

Figure 28. Schematic Diagram of the Relocation of Evacuation Agencies, Stations, Platforms, and Districts. Itineraries.

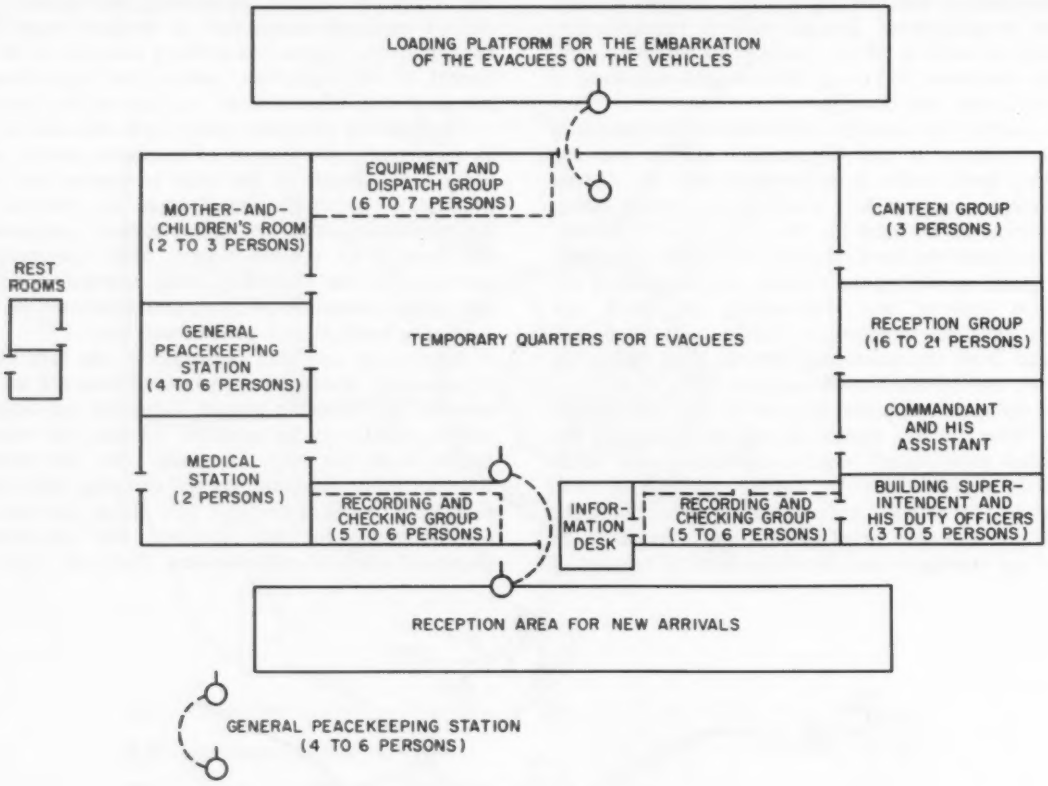
LOADING PLATFORM FOR THE EMBARKATION OF THE EVACUEES ON THE VEHICLES
EQUIPMENT AND DISPATCH GROUP (6 TO 7 PERSONS)
MOTHER-AND-CHILDREN'S ROOM (2 TO 3 PERSONS)
CANTEEN GROUP (3 PERSONS)
REST ROOMS
GENERAL PEACEKEEPING STATION (4 TO 6 PERSONS)
TEMPORARY QUARTERS FOR EVACUEES
RECEPTION GROUP (16 TO 21 PERSONS)
COMMANDANT AND HIS ASSISTANT
MEDICAL STATION (2 PERSONS)
RECORDING AND CHECKING GROUP (5 TO 6 PERSONS)
INFORMATION DESK
RECORDING AND CHECKING GROUP (5 TO 6 PERSONS)
BUILDING SUPERINTENDENT AND HIS DUTY OFFICERS (3 TO 5 PERSONS)
RECEPTION AREA FOR NEW ARRIVALS
GENERAL PEACEKEEPING STATION (4 TO 6 PERSONS)

Figure 29. Diagram for a Reception Center.

close collaboration with the district evacuation commission.

No reception centers will be established at the collective and state farms to which only few evacuees will be assigned. In this case the supervisory and staff personnel of the civil defense organization will resolve questions involving the reception and relocation of the incoming urban population. Evacuation reception centers will be organized at large farms scheduled to receive a large number of evacuees.

The state and collective farms may receive dispersed and evacuated people both from the district evacuation centers and directly from the disembarkation or unloading stations. In the first case, the receiving centers of the collective and state farms are organized at a central location within the farms; in the second case, they are set up right at the unloading station itself.

Communal buildings, such as schools or clubs, are considered well suited for housing reception centers. Such an arrangement makes it possible to accommodate temporarily the new arrivals at any time of the day or year and in any kind of weather. The problems to be resolved at the receiving centers are very important and carry high responsibility: the incoming people must be met, registered, assigned to various communities, and sent to their quarters in an orderly manner.

Depending on the difficulties encountered and local conditions, the staff of the center could include the following persons: the commandant, his "political" deputy, the recording and checking group (10-12 persons), the building superintendent and his duty officers (3-5 persons), the group receiving the evacuees (16-21 persons), the equipping and dispatch group (6-7 persons), the canteen group (3 persons), medical station staff (2 persons), mother-and-children room staff (2 persons), and the peace-keeping group (4-6 persons). (Fig. 29).

In order to ensure the smooth operation of the reception center, the needed documents must be prepared during peacetime. The number and type of the required documents depend on the specific case. The main documents include: the list of evacuees scheduled to arrive at the center; the list of the staff of the center; the warning plan, the telephone directory of the civil defense officials, the list of the communities to which the evacuees will be assigned; the type and number of vehicles for transporting the evacuees to the relocation areas; sample evacuation certificates; forms for

checking the evacuees, and the organization chart of the center's personnel.

One of the collective or state farm managers is named as the commandant of the reception center. He must study in peacetime the problems involved in receiving and relocating the incoming people—the problems of operating the reception center, the number of people expected at the center, the communities to which they will be assigned, the number of the special trains and automobile convoys, their unloading stations, the estimated time of arrival of the trains, and the location of building sites designated as radiation-protection shelters.

In case of contamination of the area he is the one who must take steps to provide protection for the people in the radiation-protection shelters.

The political deputy of the commandant is responsible for the organization and implementation of political education.

The building superintendent is responsible for the preparation and equipment of the building at the reception center.

Back at the city, each plant and factory will organize an evacuation commission; it designates the evacuation assembly and loading centers. These urban evacuation commissions keep track of the employees and their family members who are subject to dispersal (evacuation), organize their evacuation assembly centers and schedule dispersal and evacuation operations. The commission also inspects the outlying areas in question and, in cooperation with the evacuation reception commission of the rural district, prepares a detailed list of the billets.

The lists of individuals subject to dispersal (evacuation) are checked from time to time. One copy of the list is kept in the evacuation assembly center while the second is transmitted to the evacuation reception commission of the rural district together with a copy of the dispersal and evacuation plan.

The evacuation assembly center is responsible for the assembly and registration of the evacuees, their orderly loading on vehicles, and their transportation to the outlying area. The centers are established by the executive committees of the regional (urban) workers councils on the basis of the place of work or residence of the persons to be evacuated, at the rate of one center for 2,000-3,000 persons. They will be located in communal buildings, such as schools, clubs, etc. When establishing evacuation assembly centers, the availability of suitable roads for transportation, parking, and access to the main highways must be taken into account. The people to be dispersed and evacuated must know the location of their center and the rules for assembling and embarking on the vehicles.

The evacuation assembly centers assume responsibility for alerting people on beginning of dispersal and evacuation operations, assembling and registering the people and getting them transportation to the outlying area, planning the loading operations, forming convoys and sending them to the loading points, keeping the people informed about the situation, providing shelter when the "air-alarm" signal is given, and informing the district evacuation commission about the progress of their evacuation. They may assume many other functions as required by the changing situation and local conditions.

The evacuation assembly personnel are selected and trained in advance from those individuals not subject to call to the Soviet armed forces or those deferred from service.

Depending upon the duties to be fulfilled and the actual situation, the staff of the evacuation assembly may be changed. Figure 30 indicates such a change. The evacuation assembly center should be in touch with the district (urban) evacuation commission.

The following official documents must be prepared in advance during peacetime by each evacuation assembly center: an extract from the dispersal and evacuation plan for the population and a list of the individuals involved, the operational plan of the assembly center and the warning system, a directory of the staff of the assembly center, a telephone directory of the civil defense officers, a timetable for the railway and highway transportation systems, blanks for recording the evacuees, a list of itineraries, and the organization chart of the center's staff. Evacuation certification blanks will be provided to each assembly center.

The evacuation certificate consists of three parts: the certificate itself, the receipt, and the stub. It contains the family name, the first name, patronymic, the date and place of birth, residence before evacuation, the place to which the person is to be evacuated, the names of individuals evacuated with him, the number and address of the assembly center, a place to stamped as "recorded." The stub of the evacuation certificate remains at the assembly center, while the receipt is sent to the police department. The evacuee keeps the evacuation certificate itself; it serves to confirm his identity in connection with his identification card.

The ***recording and checking group*** keeps track of the people arriving at the center, assigning the evacuees to a given railway car or automobile, telling them the name of the person in charge of the vehicle, and issuing evacuation certificates to persons who have not obtained them earlier.

The ***alerting group*** informs citizens of the start of evacuation, gives them the evacuation certificates and has them sign for them, and tells them where the assembly center is and when they must arrive.

The ***transportation group*** organizes the loading of people into the vehicles and the formation of marching units, designating the lead unit and outlining to the evacuees the rules to be followed during transportation or while marching. This group includes among its members representatives from the party organization, the Young Communist League, sports clubs, and the health service.

The ***health service station*** provides assistance to sick people and helps to preserve the required sanitary conditions within the assembly center. Its personnel in-

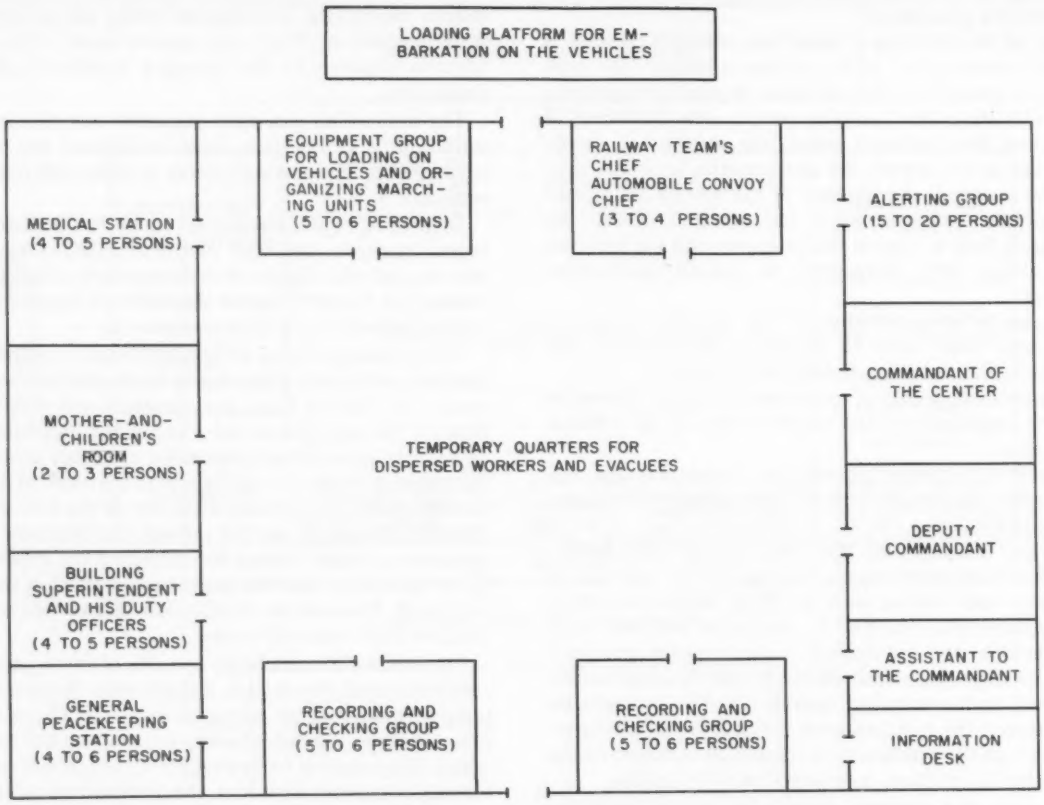
LOADING PLATFORM FOR EMBARKATION ON THE VEHICLES
EQUIPMENT GROUP FOR LOADING ON VEHICLES AND ORGANIZING MARCHING UNITS (5 TO 6 PERSONS)
RAILWAY TEAM'S CHIEF
AUTOMOBILE CONVOY CHIEF (3 TO 4 PERSONS)
ALERTING GROUP (15 TO 20 PERSONS)
MEDICAL STATION (4 TO 5 PERSONS)
COMMANDANT OF THE CENTER
MOTHER-AND-CHILDREN'S ROOM (2 TO 3 PERSONS)
TEMPORARY QUARTERS FOR DISPERSED WORKERS AND EVACUEES
DEPUTY COMMANDANT
BUILDING SUPERINTENDENT AND HIS DUTY OFFICERS (4 TO 5 PERSONS)
ASSISTANT TO THE COMMANDANT
GENERAL PEACEKEEPING STATION (4 TO 6 PERSONS)
RECORDING AND CHECKING GROUP (5 TO 6 PERSONS)
RECORDING AND CHECKING GROUP (5 TO 6 PERSONS)
INFORMATION DESK

Figure 30. Diagram for an Assembly Center.

cludes physicians, medical assistants, nurses, and medics. The physician of the center is named by the medical service of the civilian defense unit from among the medical staff of the plants and institutes assigned to that particular assembly center of from that of the municipal medical organization. He is responsible for medical matters at the assembly center and during the trip to the relocation area. Responsibilities of the physician of the medical station include looking after the evacuees, especially children and older people, and keeping on hand the necessary supply of drugs and medical instruments to provide first aid. He must report the names of seriously ill persons to the commandant of the assembly center or to the health department supervisor of the plant or the city and, in accordance with their instructions, send patients to the nearest hospital. He must check the sanitary conditions of the buildings of the assembly center, especially in the public areas, and must organize and implement the sanitary and preventive measures among the evacuees, as required by the medical regulations. These activities must be reported to the civil defense supervisor of the plant or the city.

The ***general peace-keeping group*** includes policemen and members of national volunteer service groups. The commanding officer of this group is appointed by the Public Order Department; from the operational standpoint he reports to the commandant of the assembly center. He is fully responsible for maintaining public order and safety and for supervising the loading operations.

The ***building superintendent*** is appointed from members of the supervisory staff of the plants and institutes assigned to that assembly center and reports to its commandant. His responsibilities include furnishing telephone and radio services, necessary materials, and water to the center; dividing people into groups for loading on the vehicles; and helping to organize in advance the measures necessary for protecting the people.

The ***chief of the railway or motor vehicle convoy team*** is responsible for the rapid transportation of the evacuees to the relocation areas. The chief is in charge of all personnel, including the operating train's crew. He has the right to use freely all means of communication (telegraph, telephone, radio) and transportation for carrying out official business.

Before starting the loading operations, the railway team chief must learn and check the number of the special train and its time of departure, have an accurate list

of the people on the train, designate overseers in each car, and count the persons and the accompanying luggage loaded in the cars. He is responsible for the rapid loading of the train and for reporting to the station master or the duty officer when the train is ready to depart.

Loading platforms are assigned for getting the evacuees into motor vehicles. They must be located at railroad stations, docks, ports, and piers. Loading areas for convoys may be combined with the assembly centers.

Organization of the Relocation of Workers to be Dispersed, Their Family Members, and Evacuees

The dispersal of the workers and evacuation of the population must be organized in peacetime. The supervisor of the district or municipal civil defense organization is responsible for the dispersal of workers and evacuation of the population. On the basis of his instructions, the district civil defense staff, in cooperation with service departments and the evacuation commission, develops a plan, a copy of which is sent to each plant.

On the basis of this copy of the plan, the supervisor of the civil defense organization of each facility must make his own decision and in cooperation with the evacuation commission and the service departments develops his own plan.

Orders concerning the start of dispersal and evacuations are swiftly communicated to the supervisors of the municipal, district, and plant civil defense organizations. The population is alerted by local radio broadcasts and warning signals and newspapers. At the same time the means of transportation are made ready to move the population, and the assembly centers are set up.

The managers of the motor vehicle fleets organize motor convoys, indicating their itineraries, developing timetables, and sending the vehicles to the assembly centers. The movement of the vehicles to the assembly centers is based on the previously established timetables.

The successful execution of the evacuation will depend greatly on the state of organization and discipline of the population, how much they know and how well they carry on with their duties. After they have been informed of the beginning of the dispersal and evacuation operations, all persons must start immediately to collect their essentials, clothing, footwear, underwear, bedding, food (for two to three days), medicines, and personal means of protection, packing everything in knapsacks, bags, or suitcases. The total weight of the goods should not exceed 50 kg [110 lb] per person. Everyone must also take along the following documents: identification cards, draft card, school certificates, birth certificates of children, employment booklet, evacuation certificates and money. Pre-school age children should have in their pockets or sewn to their clothes a label giving their last name, first name, patronymic, place of residence, and the ultimate evacuation point. A tag with last name, first name, patronymic, permanent residence, and final evacuation point should also be attached to each suitcase of knapsack.

The names of sick persons who are unable to accompany their family to the assembly center must be reported to the commandant of the center.

The persons arriving at the assembly center will be registered and assigned to railroad cars or motor vehicles. Afterwards, following closely the instructions of the evacuation center's staff concerning the loading schedule, the evacuees will take their assigned places in the cars. During the trip they must observe the established regulations: each person must know the number of his railroad car or motor vehicle and the name of the special train or motor convoy chief and must obey the safety rules.

It should be kept in mind that a nuclear attack on the city by the enemy may occur during the dispersal and evacuation operations. If this should happen, the actual situation will dictate what action must be taken.

If the "air alarm" signal is given when people are at home, they must warn their neighbors to shut off the electricity, gas, furnace, and the kitchen range, close the windows, take documents and immediate necessities with them, and seek refuge in the nearest shelter.

If the alert is sounded while people are on their way to the assembly evacuation center or after they have arrived there, they must immediately take refuge in the nearest shelter.

If the enemy did not attack the city with nuclear weapons, the dispersal and evacuation operations must be continued.

A nuclear attack on the city by an enemy causes a very difficult and complex situation, making it necessary to carry out the dispersal and evacuation operations simultaneously with rescue and emergency measures

During the trip, the evacuees must observe the rules applicable to travel, taking care to prevent accidents. If weapons of mass destruction by the enemy force the train to stop, everybody must get off as fast as possible. The responsible officials must be notified of this while taking steps to continue the trip.

If a motor convoy carrying people to the outlying area must pass through areas contaminated by radioactive, chemical, or bacterial materials, the contaminated zone must be bypassed at the windward side. If this is impossible, the convoy must go through the area at a high speed, using personal protection devices, such as gas masks, respirators, face masks, protective clothing,

gloves, and boots. After having passed through the contaminated area, all persons must be checked by the health service, and their clothes, shoes, and belongings decontaminated.

Evacuation of the population from the large cities is a very important protective measure. Successful execution of dispersal and evacuation requires careful and complete planning in peacetime and making sure that the evacuation units, the population at large, and the transportation crews are well trained.

Reception, Relocation, and Supervision of Dispersed Workers and Evacuees

When evacuation begins, the commandant of the civil defense organization of the rural district issues orders to his staff to make necessary preparations for the reception and relocation of the dispersed workers and evacuees, as outlined in the plan developed in peacetime. The supervisory and staff personnel and the evacuation commissions of the rural districts and state and collective farms will have some time at their disposal to prepare the reception operations. This time depends on how fast people are assembled at the assembly center, on the time required to make ready the vehicles needed to transport them, the time required for embarkation and loading (3-6 hours), the speed of the railway trains or motor convoys, and the distance to the reception area (2-4 or more hours and altogether 5-10 hours; for more remote areas, longer periods may be needed). After he receives his orders, the chairman of the district evacuation commission must make sure that the station platforms, piers, unloading areas, and reception centers are ready to receive the evacuees. He must also distribute the required forms.

In cooperation with the civil defense staff of the rural district, the commission gets in touch with the urban or district evacuation commission, working out a detailed plan for the reception and relocation of the population and a timetable for the movement of trains and motor convoys on the basis of the estimated number of people to be assigned to each special train or highway transportation unit.

The regional evacuation commission also establishes contact with the commandant and staff of the civil defense organization and evacuation commissions of all the urban facilities which are supposed to be relocated in the territory of the given rural district. He cooperates with them in developing a plan for relocating the incoming people and taking care of them.

At collective and state farms, all buildings designated to house the relocated people are released from general use, and other billeting problems are resolved. This involves assigning quarters with the local inhabitants, taking into account the increase in population density, in boarding houses, youth hostels, tourist camps, outlying farm houses, and other communal buildings; at the same time the reception centers are made ready.

On learning that dispersal and evacuation have started, the commandant of the reception center must go there immediately to assemble his staff and establish contact with supervisory personnel of the civil defense organization of the collective or state farm. He should transmit to them the pertinent portions of the plan on the relocation of dispersed and evacuated individuals and then should activate the reception center, organizing the details of its operation. He must personally meet the incoming special trains and motor convoys and is responsible for the reception of the arriving people, to whom he must explain the situation, taking steps to prevent any panic and disorder.

The chief of the train or motor convoy issues instructions on the disembarkation of people from the vehicles as they arrive at their destination; he must inform the station master or duty officer when this operation is finished. At that time, he will advise the representative of the evacuation commission of the rural district that the task has been completed, forwarding him the required records.

Members of the receiving group meet the arriving individuals and accompany them to the reception center.

Members of the recording and checking group list the names of all persons in a special book, checking their identification cards and evacuation certificates. An example of the filled out blank is shown below.

Relocation Records of Evacuees at a Collective Farm

Order No.	Last name, First name Patronymic	Year of Birth	Relationship (Head of Family, Wife, Son, Etc.)	Previous Residence	Relocation Area	Date of Arrival	Remarks
1	Sukharev, Ivan Sergeevich	1910	Head of Family	Moscow, Sovetskaya St. 5-18	Cottage	5/5	
2	Sukarev, Elena Ivanovna	1913	Wife	Same	Same	5/5	

These record books may also contain other data such as party membership, education, special expertise, military service record, etc. At the same time, it should be noted which member of the family did not arrive at the reception station and the reason. Each incoming person is to be told in what community he shall live, at what address, and who is to be his host.

The physician of the center and the health services staff will identify the sick and check their complaint. The sick will be sent to clinics for a more detailed checkup, diagnosis, and treatment. People showing symptoms of infectious diseases will be quarantined, and the vehicles will be decontaminated before being allowed to return to the city.

After registration, members of the equipment and dispatch group divide the new arrivals among the communities, providing them with an escort to their permanent quarters, and using cars and trucks for transporting them there. If there is a shortage of vehicles, the evacuees will be sent on foot to the relocation community. In such a case, only mothers with children, pregnant women, invalids, old people, and their belongings will be transported.

In each community the evacuees must be met by a special detachment whose members will guide them to their assigned homes. The evacuees must follow all orders of local, party, and government agencies and must observe the regulations concerning proper behavior.

Collective means of protection are provided in advance in the dispersal and evacuation areas. If the number of available shelters is not sufficient to protect the incoming urban population, the local government agencies will build additional simple radiation protection shelters and will supply personal means of protection. All able bodied people, including the new arrivals from the city, must participate in this work.

Provision of food, communal services, and medical care at the outlying area to the workers, members of their families, and evacuees is of the greatest importance.

The food and supplies office of the rural district has the responsibility of supplying food and essentials to the population. During the first two days the people are expected to survive on the food that they have brought with them. Hot food is to be prepared at their permanent residence or may be supplied through boarding houses, tearooms, coffee houses, or restaurants. If necessary, feeding stations should be organized, using field kitchens, large cooking vessels, and other mass feeding equipment.

It is very important to protect food products from radioactive, chemical, and bacterial contamination by strictly following the food storage regulations. Greatest care must be applied when handling food products, and steps taken to prevent radioactive fallout from reaching the food during transportation and preparation. Therefore, all outer clothing and footwear must be removed upon entering, the hands and face must be carefully washed with soap, and the leftovers must be repacked.

The community service organizations, such as tradesmen, barbers and hairdressers, laundries, and bath houses are responsible for providing public services to the population in the relocation areas. If necessary, these services may be increased by relocating similar groups from the city to the outlying area.

Persons trained in various communal and public service fields among the evacuees should be recruited to collaborate with the local communal organizations. The evacuation agencies and the executive committees of the workers council should see that relocated people can withdraw their deposits from the urban savings banks.

As a general rule, the already existing network of hospitals, polyclinics, rural outpatient centers, and pharmacies will be responsible for providing medical service to the population. Operation of these agencies will be greatly complicated by radioactive, chemical, and bacteriological contamination. People exposed to the effects of radioactive, chemical, and bacterial weapons are likely to be present along with their usual patients. Health care at the home is expected to play a considerably increased role.

In order to increase the effectiveness of polyclinics, hospitals, and health care centers and to enlarge the number of paramedical personnel, physicians, nurses, medical assistants, and persons with some medical training among the evacuees must be recruited for this activity.

The Party and government organizations of the involved rural districts and the managers of the cooperative and state farms, institutes, and plants must plan and organize the work assignments of the evacuees. Work should be provided for them in the collective and state farms and in the relocated plants which continue their operations at an outlying site after transfer from the city. When assigning the work, the expertise of the incoming evacuees must be taken into consideration. Specifically, the evacuees should be assigned to sowing, tending, and harvesting field crops in the collective and state farms.

Political Activity of the Party during the Dispersal of Workers and Evacuation of the Population

Under these difficult conditions the political and educational work of the party among the population becomes especially important.

The political activity of the party is organized on the basis of the program and constitution of the Communist Party of the Soviet Union; decrees of the Central Committee of the Party and the Soviet Government; instructions and directives of the High Command and the

head of the civil defense organization of the USSR; the resolutions, directives, and instructions of the Central Committees of the Communist Parties of the Union republics and district, county, regional committees, and city committees of the party. The party organizations, under the supervision of the local party agencies, carry out political and educational activity among the population.

The political work of the party becomes especially important during the period of dispersal and evacuation. This activity is the responsibility of the party organizations of the plants, institutes, districts, and cities of similar agencies of the collective and state farms, facilities, and rural, regional, and district party committees.

The political activity of the party is already started in peacetime to acquaint all citizens with the importance of the evacuation and to help civil defense organizations and evacuation commissions. The political party workers must also assist in the implementation of dispersal and evacuation and the operations of the evacuation posts, cooperating with the evacuation agencies in the advance preparation of the outlying areas. Working closely with the supervisors of the pary organizations of the state and collective farms in the relocation and evacuation districts is very helpful in resolving problems of providing for the evacuees.

When the country is threatened with an attack and dispersal and evacuation operations have started, persons involved in the political apparatus of the party must alert the staffs of the evacuation agencies and the population, advising them that the dispersal and evacuation are in progress and offering assistance in directing them to the assembly centers. The party staff will inform workers and the population at large of the general rules of conduct that must be observed at those centers during the trip and at the relocation centers to help to keep up the morale of the population and to increase their awareness of the importance of the operations. These agencies must mask and counter enemy propaganda to prevent potential panic-causing rumors, maintaining order and discipline during the embarkation and the trip.

When the workers and evacuees arrive at the outlying location, the political party workers must organize as fast as possible the reception of the incoming people at the stations, platforms, disembarkation points, and reception centers, ensuring an orderly billeting of the incoming people at the various communities and public buildings. The party staff must help supply the population with water, food, and communal and medical services, equipping existing shelters, constructing additional ones, and providing some simple personal means of protection. Staff members should also help by explaining to the population the rules of conduct in contaminated zones and organizing work for the evacuees, assigning them to work shifts at the plants which continue to function in the city.

Special political activity should be carried on among the transportation workers on whose efficient operation the dispersal of workers and service personnel will depend.▲

BLUEPRINT FOR INDUSTRIAL DISASTER READINESS

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This is the second in a series of articles prepared for Environment Control and Safety Magazine by the government's number one spokesman on methods of industrial disaster and emergency preparedness. The first article was published in the August-September 1971 edition of the Digest.

No plant is immune to catastrophe.

Planning for emergencies and disasters which may strike an entire company or any of its individual plants and facilities is not a luxury. It is good insurance.

Some companies have made *minimum* emergency plans only to comply with local laws. Thousands of other companies have developed comprehensive plans to limit damage from any *peacetime* emergency. But this is not enough. Plans should also be developed to cover wartime disaster—to minimize the effects of nuclear attack. Thousands of additional companies have developed disaster plans to meet all eventualities—both peacetime and wartime hazards.

It is a long-established principle in emergency and disaster planning that preparedness must be for the worst type of emergency. Unquestionably, the worst disaster would be an enemy attack with thermonuclear weapons. Therefore, preparedness for a wartime emergency would assure preparedness for peacetime emergencies.

The framework of an effective disaster-control organization is already in existence in most industrial plants where fire brigades, guard services, rescue teams, first aid, and welfare groups have been established.

No effort should be made to establish a separate civil defense organization to replace the normal plant protection organization. Instead, plans should provide for quickly expanding existing forces, supplemented by auxiliaries as necessary, to meet large-scale disasters more effectively. In addition, these specialized groups can serve as auxiliaries to local government forces.

To be prepared for *wartime* emergency it is necessary for companies to *enlarge and extend their day-to-day emergency plans.* Disaster-control measures involving major industrial accidents such as fires and explosions, natural disasters such as tornadoes, hurricanes, floods, blizzards, earthquakes, or volcanic eruptions, and civil disturbances or bomb threats *have equal application in event of wartime nuclear attack.* Enlarging and extending plans for peacetime emergencies by addition of fallout shelters and a radiological detection capability can prepare a company to minimize the effects of nuclear attack and withstand the hazard of postattack *environmental control* necessitated by radioactive fallout.

A company plan that covers all contingencies is not only a good investment, but is also a significant contribution to national security. Development of the corporate and various plant disaster readiness plans is a job for management. The disaster readiness plan should consist of elements to achieve the following objectives:

- Management of the company disaster program.
- Protection for employees.
- Safeguarding the plant and property.
- Organizational capability to manage disaster conditions.
- Preservation of the corporate structure.
- Informing and educating employees.
- Emergency repair and restoration.

Typical actions which business and industrial managements should take to achieve each of the above objectives are briefly outlined here.

Management of the program

• Get in touch with the local civil defense and disaster coordinator. It is the job of local government to provide guidance and assistance, and to coordinate emergency planning activities among various departments of local government. This includes the development of plans to utilize nongovernment leadership and resources. Continuing liaison must be maintained to ensure proper coordination.

• Establish corporate and plant leadership responsibility for disaster preparedness. One of the first steps in preparing for disaster is appointment of a single individual at the corporate level to provide coordination and direction.

• Appoint advisory committees. Select representatives from various departments of the company to serve on advisory committees at both company and plant levels.

• Issue appropriate policy statements and administrative directives. Executive action is necessary to estab-

lish the disaster control program, and to inform all executive and supervisory personnel of corporate attitudes and procedures.

• Train corporate and plant disaster coordinators and advisory committees. Managers of the disaster program should become thoroughly familiar with the authority, organization, and emergency procedures established by law and which become effective upon declaration of a Civil Defense Emergency by the President or the Congress. (A special OCD Staff College course in industrial CD management provides comprehensive training in how to develop and manage company disaster plans. Courses scheduled for 1971 were April 12–16, July 19–23, October 18–22. Tuition and living quarters are free. Publications are provided to establish a complete private library on disaster management. Further information on future is available from local government CD directors.)

• Assess vulnerability of plant and corporate headquarters locations. This is basic to determining the readiness requirements of each plant. Consideration should be given to factors such as the nature of construction and availability of shelters, combustibility, processes and materials that would be hazardous under emergency conditions or which might generate hazardous by-products, and physical arrangements of space and equipment in relation to exits and passageways required for the mass movement of employees.

• Establish a plant warning system. Arrangements should be made to receive attack warning information and to alert employees quickly throughout the plant. Where buildings are spread over a wide area or located beyond hearing distance of community warning signals, a separate warning system may be necessary. Inform employees of *how* they will be warned of impending attack, what the signal is, what it means, and what action should be taken upon receipt of warning.

• Establish a control center and communications system. An Emergency Operating Center (EOC) should be set up, with communications to the EOC of the local government and to other plants in the community which are members of the mutual aid association. It is especially important for the plant civil defense coordinator to be acquainted with the situation. Even a small plant should have an EOC. Some companies have located their EOC's underground to provide some blast protection and excellent fallout protection.

• Prepare a manual of corporate and plant disaster plans to include:

(1) the company policy statement regarding civil defense planning (2) a statement of the purpose of the plan (3) description of warning and emergency communications procedures (4) the nature and responsibility of each plant protective service, a list of team leaders and members, and an outline of *who* does *what* in a disaster (5) drawings of plant floor plans, shelter locations, and evacuation routes (6) a list of available emergency equipment, and a list of needed equipment.

The disaster plan should be furnished to executives and members of the protective and self-help groups.

• Tell stockholders about the company disaster program. This gives assurance to the investors that the company is planning to continue in business following an emergency.

• Tell the public that you have made plans for wartime emergency and disaster control in your company and in each plant. Some companies have included information regarding their civil defense plans in advertisements, radio announcements, and TV skits.

• Support and assist local government in preparing for community shelter planning and disaster control efforts. Industry has the managerial skills, facilities, communications channels, and people to stimulate understanding of the need for fallout shelter and for the organization and training necessary to make best use of it. In communities in which there is little or no civil defense activity, alert industrial management can motivate other community leaders and assist them in creating and developing an effective civil defense program.

Protection of employees

• Provide fallout shelter for employees and the public. Intensive studies of nuclear weapons and their effects have made it clear that shelters could save thousands of lives in a fallout situation resulting from nuclear attack. A nationwide system of fallout shelter has been established, but more must be done. Cooperate wit your local government in permitting your plants, office buildings, and other facilities to be surveyed to determine their suitability for use as fallout shelters; and to permit your buildings to be used by the public in event of attack. Allow posting of public shelter signs, and stocking of the shelter areas with supplies provided free (water drums, a food ration, health and medical supplies and radiological monitoring instruments). When you build, include plans for dual-use fallout shelter in the initial design.

Employees should have fallout protection where they live. Urge them to arrange shelter for themselves and their families by preparing home shelters or by assuring that they know where nearby public shelter is located.

• Plan for mass movement of employees. Rapid movement of civilians from dangerous and potentially dangerous areas to shelter in time of civil defense emergency requires thorough organization, timing, and supervision. A general traffic plan, both within and outside the plant, must be made; directional signs and instructions posted, and, if necessary, adequate transportation provided. The plans should include a priority departure for operating and maintenance personnel so that plant shutdown can be orderly, and production resumed as quickly as possible.

Safeguarding plant and property

• Develop emergency shutdown procedures. Orderly and speedy shutdown in industrial plants in time of

emergency is vital. Whether simply pulling a switch, closing a valve, or cooling a large furnace, all must be planned for in advance. Explosive gas fumes, high-voltage lines, fire, and similar hazards can be almost as deadly as natural forces or military weapons. Procedures must be planned and tested. Mock shutdown training exercises are conducted regularly in many plants.

• Establish a plant security system to minimize effects of sabotage, espionage, bomb threats, riots, and civil disorders. Industry should take appropriate measures to deter any destructive act that would endanger employees or impair the productive capacity of the plant. Protective measures include adequate guard or watchman services, fencing, protective lighting, investigation of applicatns and employees, pass and identification systems, safeguarding classified information, and reporting to the FBI any suspicion of sabotage, espionage, or subversion.

• Provide emergency protection from delayed or unconventional weapons effects. Organization and training must ensure prompt reporting to state and local police forces which will conduct reconnaissance for unexploded ordnance and report the existence of such ordnance to the closest Department of Defense Explosive Ordnance Disposal Unit or Army commander.

• Deconcentrate production of critical items. Geographic decentralization refers not only to production lines but also to management and technical offices.

• Disperse new industrial plants. By multiplying the number of targets an enemy must hit to inflict the same total damage, industrial plant dispersal tends to reduce the total effects of attack on the capability to produce. Consideration should be given also to placing the entire plant underground.

To manage disaster condition

• Enlarge existing protective groups. The existing peacetime organization should be enlarged to meet large-scale disaster.

• Organize and train employees for self-help. Self-help is the concept of training each employee, and organizing and training small groups, for specialized emergency services such as firefighting, rescue, police, first aid, and radiological monitoring.

• Enroll these groups into departments of local government as auxiliaries. Most plants already have organized and trained fire brigades, guard services, rescue teams, and first aid and welfare groups. These can serve as auxiliaries to the various departments of local government, enlarging its disaster management capability.

• Train for shelter management, radiological monitoring, first aid, and medical self-help, decontamination rescue, and firefighting. To cope with the hazards of major peacetime disaster or wartime emergencies, more employees should be trained in more protective measures. Courses are available through local and state government, state universities, state departments of education, and the OCD Staff College.

• Join with neighboring plants in organizing industrial mutual-aid associations for emergency. Few plants can provide *all* the services and equipment needed. Many mutual-aid groups have catalogued their supplies of fire hose and other equipment, medical supplies and rescue items, so each member of the group knows what is on hand.

Preservation of corporate structure

• Establish executive succession list to ensure continuity of management. For each key position, replacement should be designated in order of succession. Thus, the surviving person highest on the executive succession list could assume temporary responsibilities following attack.

• Amend corporate bylaws and administrative regulations where necessary. "Legalized leadership" by appropriate authorization is often necessary in event of emergency. Each function should be reviewed.

• Establish alternate corporate and plant headquarters. If continuity of management is to be preserved, managers must have a *place to assemble and work*, equipped and furnished for carrying on corporate operations during and after an emergency. The facility should have fallout protection and should be equipped with communications and living quarters.

• Protect vital company records and documents. Managers must be available (continuity of management) not only in a place to work (*E*mergency *O*perating *C*enter), but they must also have tools for work (vital records). Protection of vital records includes duplication and safe storage. Written descriptions of activities, manufacturing processes, engineering designs and essential legal documents and accounting records must be safeguarded to aid in continuation or restoration of production. (The number-one objective of recent rioting was destruction of company records.)

• Plan for continuity of each important corporate function. The enlarged aspects of industrial civil defense planning must involve the security officer, purchasing agent, treasurer and controller, personnel director, general counsel, secretary, production manager, chief engineer, head of research, and the board of directors. Each department head must examine the functions for which he is responsible. Many peacetime functions would become unnecessary in an emergency, while some would become extremely complicated and vitally necessary.

• Assign emergency functions to each employee. A severe emergency may convert an ortanization into quite a different structure, with altered or expanded functions. Some groups of employees will become surplus at the same time that other units urgently need more workers.

• Develop emergency financial procedures. Money may be needed promptly for wage payment, cash advances to employees, payment of bills, and purchase of survival items such as medicine, food, and equipment.

Emergency procedures for drawing company funds should be developed in advance.

• Designate emergency assembly points for employees during disaster. Some companies have set up reporting centers at the homes of executive personnel who reside in suburban areas. Certain records are maintained at these locations, and arrangements have been made for priority telephone service in an emergency.

Informing and educating employees

• Tell employees about the company disaster plan. Handbooks should be prepared containing basic information to be given to all employees.

• Test the disaster control plan with periodic drills and exercises. All plant employees should be tested in movements to shelters or other safe areas. Management personnel should go to the emergency headquarters and practice working under simulated attack conditions. Shutdown procedures should be simulated. When community civil defense exercises are held, management should cooperate with local government.

• Tell employees about the community disaster plan. It is not enough to know the disaster plan at the workplace and have a disaster plan at home, but employees should be familiar with the overall Civil Defense and Disaster Plan of the community in which they work and reside.

• Educate employees in methods of personal and family survival. Divil Defense publications are available free from local government offices. These publications should be given to employees, along with an appropriate letter from management urging them to make survival plans at home. Thousands of companies have given the OCD Handbook H-14, "In Time of Emergency," to employees. In addition, special short courses on personal preparedness, and a five-lesson correspondence course are available free.

• Publish stories about civil defense in company and employee publications. Information regarding emergency preparedness techniques should be included as a regular feature in employee publications.

• Urge discussion of civil defense at employee meetings. Many companies have made discussion of disaster preparedness a regular part of employee safety meetings, and of special meetings of employee unions and other groups. Some have incorporated disaster-preparedness instruction as a part of their "off-the-job" safety programs.

Emergency repair and restoration

• Prepare to assess and report damage quickly. Early and comprehensive assessment of damage is vital to quick recovery. Each level of government will design systems capable of providing rapid and reasonably accurate estimates of (1) locations and degree of attack effect —especially radiological contamination—and (2) what has survived the attack and is useful for recovery. Industrial managements would be expected to cooperate fully in reporting as required to local authorities the nature and extent of damage to their plants. Decentralized and dispersed multi-plant corporations would need to receive such information also at their emergency company headquarters.

• Develop plans for quickly training employees following attack. As the result of major disaster, many companies have redirected major aspects of their production programs. For a company to continue in business and quickly get back to normal production, it may be necessary to train many new employees in new skills.

• Plan for emergency repair and restoration. In a natural disaster emergency, repair crews usually are available from many outside areas. In event of attack, however, outside assistance may not be available. Therefore, each plant must have its own emergency repair crews. A good disaster plan will provide for the training of employees to repair damaged electrical, communications, gas, water and other vital facilities. Local utility companies can assist. Plans should be made for replacement or repair of damaged production machinery and supplies, use of alternate production methods, and substitute production machinery and facilities, including standby power and communications equipment.

Conclusion

These, in the main, are the important steps which must be taken by industry in order to survive a peacetime disaster or nuclear attack.

No one plan will fit all companies. Overemphasis cannot be given to the importance of basing company disaster plans on the local situation. Corporate executives must recognize, therefore, that the steps suggested here can only provide general assistance, and that specific plans must be built on careful analysis of the local situation and on the creativeness, imagination, and common sense of the local planners.

Industry has always assumed immense tasks and taken great initiative in national emergencies. We do not expect an attack on this country. But it is always a possibility. Therefore, industry should direct its imagination and energy *now* to ways and means of providing adequate fallout shelter and related facilities for its employees, and in planning other protective measures.▲

Swedish Officials Visit Canada EMO

A study of Canadian civil emergency planning with special emphasis on program planning and budgeting was the purpose of a recent visit to Canada by five Swedish Civil Defence officials.

During their week in Canada the group was briefed by Canada Emergency Measures Organization authorities in Ottawa, visited the Canadian Emergency Measures College at Arnprior, Ontario, and held discussions with federal, provincial and municipal emergency planners in Toronto.

On arrival from the United States where they received civil defence briefings during the previous week the Swedish visitors were greeted by C. R. Patterson, National Coordinator, Civil Emergency Measures. During their visit to Ottawa officers of the Canada Emergency Measures Organization gave briefings on Canadian protection planning; the public warning system; finance, planning and budgeting systems and research and development studies.

In the photo from left to right are: Lars Bowallius, Head of Operations Research in the Stockholm Research Institute of National Defence; Sten Gustafsson, Head of the Swedish Planning Directorate; Lars Ridervik, Head of the Investigation Branch; Ingemar Lekteus, Head of Branch for Studies and Long Term Planning; Karl Low, Head of Organization, Finance Division; and C. R. Patterson, Canada's National Coordinator.

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